

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit:

Examiner:

P.D. File No.: H0004478

In re Application of: THOMAS Y-T. TAM ET AL.

Serial No.: 10/699,416

Filed: October 31, 2003

For: PROCESS FOR DRAWING GEL-SPUN POLYETHYLENE YARNS

Colonial Heights, VA 23834

December 18, 2003

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 - 1.98

Sir:

In accordance with the duty of disclosure under 37 CFR §1.56, applicant(s) hereby notify the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO-1449 form which the Examiner may deem relevant to patentability of the claims of the above-identified application. One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed (1) no later than three months from the applications filing date or (2) before the mailing date of the first Office Action on the merits, and therefore no certification under 37 CFR §1.97(e) or fee under 37 CFR §1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application.

Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Serial No. 10/699,416 Filed October 31, 2003

Applicants respectfully request that the listed documents be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP § 609.

Respectfully submitted,

Virginia Szigeti

Applicants' Attorney Registration No. 29,039

Honeywell International Inc. 15801 Woods Edge Road Colonial Heights, VA 23834 (804) 520-3651

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICES AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450

ON: Pecember 18,2003

NAME OF APPLICANT, ASSIGNEE OR APPLICANT'S ATTORNEY

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December 18, 200.

FORM PTO-1449 (Rev. 2-32)	U.S. DEPARTMEN PATENT AND TR	NT OF COMMERCE ADEMARK OFFICE	ATTY. DOCKET NO: H0004478	SERIAL NO.: 10/699,416			
	FORMATION DISCLOS ATEMENT BY APPLIC		APPLICANT: Tam et al.	<u> </u>			
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TRADEMARK DE		U.S. PATENT	DOCUMENTS				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	1	NG DATE IF OPRIATE
	4,411,854	10/25/1983	Maurer et al.	264	205	12/1	5/1981
	4,422,993	12/27/1983	Smith et al.	264	210.8	 	4/1980
	4,413,110	11/01/1983	Kavesh et al.	526	348	03/1	9/1982
	4,430,383	02/07/1984	Smith et al.	428	364	+	0/1982
	4,436,689	03/13/1984	Smith et al.	264	204	 	8/1982
	4,536,536	08/20/1985	Kavesh et al.	534	462	├	3/1983
	4,545,950	10/08/1985	Motooka et al.	264	210.8	 	8/1983
	4,551,296	11/05/1985	Kavesh et al.	264	177	<u> </u>	0/1984
	4,612,148	11/16/1986	Motooka et al.	264	49	 	6/1985
	4,617,233	11/14/1986	Ohta et al.	428	364	 	1/1984
	4,663,101	05/05/1987	Kavesh et al.	264	178		1/1985
	5,032,338	07/16/1991	Weedon et al.	264	203		2/1989
	5,246,657	09/21/1993	Yagi et al.	264	210.6		3/1992
	5,286,435	02/15/1994	Slutsker et al.	264	205		1/1987
	" -	FOREIGN PATE	NT DOCUMENTS		Ļ <u>.</u>		
						TRANS	SLATION
	DOCUMENT NUMBER	DATE P	PATENTEE OR APPLICANT	CLASS	SUBCLASS	YES	NO
	GB 2,042,414A	09/24/1980	Smith et al.	D01D5	04	Х	
	EP 0 320 188 A2	06/14/1989	Takeda et al.	D01F5	04	X	
	JP-A-60/52647	08/30/1983	Toyo Boseki K.K.	D02J1	22		Х
	JP 238416-1995	09/12/1995	Oh-ya	D01F	6/04	Х	
	EP 0 077,590	04/27/1983	Kirschbaum et al.	D01D5	04	X	
	OTHER DOCUME	ENTS (Including Au	ıthor, Title, Date, Perti	nent Pages,	etc.)		<u> </u>
	2, Influen	ce of Solvent on the	ength Polyethylene Filar Drawability" <u>Macromo</u>	 Chem., 18 	0, 2983 (197	(9)	-
	2, Influence of Solvent on the Drawability" Macromol. Chem., 180, 2983 (1979) P. Smith et al., "Ultra-high-strength Polyethylene Filaments by Solution Spinning/Drawing" J. Matl. Sci, 15, 505, 1980						
	Kalb et al., "Hot Drawing of Porous High Molecular Weight Polyethylene, Polymer, 21, 3 (1980)						
	J. Smook of Porous	et al., "Influence of S High Molecular We	Spinning/Hot Drawining eight Polyethylene", <u>Pol</u>	Conditions	on the Tensi	le Strei	ngth
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Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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			5,342,567	10/30/1994	Chen et al.	264	203	07/01	8/1993	
			5,578,374	11/26/1996	Dunbar et al.	428	364	02/08	3/1995	
			5,736,244	04/07/1998	Kavesh et al.	428	364	10/28	3/1995	
ſ			5,741,451	04/21/1998	Dunbar et al.	264	103	08/17	7/1995	
ſ			5,958,582	09/28/1999	Dunbar et al.	428	364	10/20)/1998	
			5,972,498	10/26/1999	Kavesh et al.	428	364	03/23	3/1998	
			6,448,359	10/10/2002	Kavesh	526	352	03/27	7/2000	
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L	J. Smook et al., "the Effect of Temperature and Deformation Rate on the Hot Drawing Behavlior of Porous High-Molecular Weight PE Fibers", J.Appl. Poly.Sci.,27,2209 (1982)									
			B. Kalb e	t al.,"Spinning of H	igh Molecular Weight I oly. Bull., 1, 871 (1979)	PESolution ar	d Subsequer	it Drawi	ing in	
		 	J. Smook	et. al., "Elastic Flow	Instabilities and Shish	-Kebab Form	ation During	Gel-Sp	inning	
L	EXAMINER		Of Ultra-	High Molecular We	ight Polyethylene", J. N	Matl. Sci. 19, 1	31 (1984)			
L	EXAMINER DATE CONSIDERED									

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1	FORM PTO-14 (Rev 2-32)	449 U.S. DEPARTMENT OF COMMER PATENT AND TRADEMARK OFF		SERIAL NO.: 10/699,416				
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3	5 5 5003 e	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Tam et al.					
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L		A.J. Pennings et al., "Med	chanical Properties of U	ltra-High Molecular W	eight PE Fibres in			
L	Relation to Structural Changes and Chain Scissioning Upon Spinning and Hot Drawing", J. Matl. Sci., 19, 3443 (1984)							
		J.P.Penning et al., "The Effect of Fibre Diameter on the Drawing Behaviour of Gel-Spun Ultra-High Molecular Weight PE Fibres", Poly. Bull., 31, 243 (1993)						
		P. Smith et al., Ultradrawing of High Molecular Weight PE Cast From Solution. II. Influence of Polymer Concentration", J. Poly. Sci., Poly. Phys. Ed., 19, 877 (1981)						
Ĺ	EXAMINER		DATE CON	ISIDERED				

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.